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ABSTRACT

This guide is intended for use with the frail elderly, and as a start-off point for the well elderly who may not be engaged in an exercise program. Following a discussion on the values of an exercise program for older adults, suggestions are made for motivating participants to exercise. Precautions before, during, and after exercise are discussed. Implementing an elder fitness program is described, covering selecting the appropriate time and place, the equipment needed, and publicity. Detailed descriptions are given of eight fitness sessions. Walking as an adjunct to the elder fitness program is discussed. The appendices contain references for additional resources for the fitness program. (JD)

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Elder Fit

A Health and Fitness Guide for Older Adults

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Elder Fit

Elder Fit

A Health and Fitness Program for Older Adults

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Hostos Community College
City University of New York

Sponsored by the Council on Aging and Adult Development
of the Association of Research, Administration,
Professional Councils & Societies
an association of the
American Alliance for Health,
Physical Education, Recreation, and Dance

To Miriam
Belle and Leon
My most vibrant parents
who inspired me
to write this book

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4. Standards and guidelines—to further the continuous development and evaluation of standards within the profession for personnel and programs in health, leisure, and movement-related activities.
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Introduction

In recent years there has been an increased awareness of the importance of health consciousness for senior citizens. This new awareness has led to the establishment of exercise groups in senior centers and nutrition sites, nursing homes and retirement communities, and schools and community centers.

There is a great need to train qualified individuals to lead these exercise groups and to give them a simple, yet comprehensive, program to use. This book has been written to assist physical education instructors and activity leaders in creating a meaningful health and exercise program for older adults.

The Elder Fit course is being used successfully by the New York City Department for the Aging's *Project Stay Well.* This project was initiated in collaboration with the New York Academy of Medicine for implementation at New York City senior citizen centers. The format of the project consists of a six-session course in which the seniors hear and see various presentations from outside health agencies such as the American Heart Association, National Dairy Council, etc. These lecture-demonstrations are then followed by senior participation in the Elder Fit course.

This guide is intended for use with the frail elderly, and as a start-off point for the well elderly who may not be engaged in an exercise program. It is not merely a series of nonstrenuous, low level exercises, but it also includes a discussion of basic health concepts as they relate to older people.

Prospective instructors and activity leaders should find this book very helpful. It will provide them with practical hints on class organization, precautions in exercise for older adults, and clear instructions in the various exercise and relaxation techniques.

It must be emphasized that the Elder Fit exercise sessions illustrated in this book are to be used as a model or guide. Individual instructors should use this material as a take-off point, and then add or delete according to their own specialties and backgrounds and the interests and limitations of their particular exercise group.

1

The Importance of the Elder Fit Program for Older Adults

It is essential in beginning the Elder Fit program to inform the participating seniors of the importance of exercise to their physical and mental well being. Too often, activity leaders merely lead their groups through a series of exercises without discussing the overall benefits of such exertion. This "follow me" type of exercise session may be temporarily stimulating and enjoyable, but it usually does not lead to the lifelong commitment that is necessary to improve physical condition and enhance the quality of one's life.

Motivating Seniors to Exercise

At the introductory Elder Fit session(s), the activity leader should discuss the topic of aging and the values of exercise as we age. This should be followed by a film or video cassette about senior exercise. (See recommended films at the end of this chapter.)

Discuss Aging

When seniors are asked what aging means to them, they usually indicate their chronological age and point to the observable signs of aging, such as graying hair, loss of skin elasticity, and the need for reading glasses. Further discussion leads them to investigate the decline in the internal systems of the body, which generally leads to decreased efficiency in body functions. As we age, for example, blood

pressure increases, the heart's ability to pump blood decreases, and the ability of the heart and lungs to process oxygen also declines.

Another sign of aging that is usually observed is a decline in muscular strength and endurance. Joints may become inflamed and stiffen and often make the simplest activities impossible to do. Bones may exhibit a loss of density that makes them prone to fractures, a condition known as osteoporosis.

Changes in the nervous system also occur with aging. Our special senses of hearing, smell, and sight depreciate. Reaction time and sense of balance and position may be affected by the loss of proprioceptive sensitivity in our feet. [1]

It would seem that a discussion of the process of aging would lead older adults to avoid an exercise program. If our body changes are so inevitable, then why should we bother doing anything about them? It is here that the activity leader must intervene. He or she must emphasize that aging is an individual process and that no two people exhibit all the signs of aging in any particular order or definite time.

Dr. Herbert A. deVries, recently retired director of The Andrus Gerontology Center at The University of Southern California, describes the aging body in his book ***Fitness after 50.*** He contends that physiological changes accompany aging, but he says that "There is no solid evidence that they cause or are caused by it." [2]

Recent research studies indicate that moderate exercise done later in life can not only ***retard*** the effects of aging, but may also ***reverse*** negative changes. By describing the results of these studies to our seniors, we can motivate them to participate in the Elder Fit program and can challenge them to see positive results through their own experiences.

Dr. deVries describes a study of over 200 older men and women at the Leisure World retirement community in Laguna Hills, California. The seniors in this program participated in hour-long sessions, three to five times a week, which consisted of a walk-jog routine, calisthenics, and static stretching.

"Six weeks after the program started, we began to see dramatic changes in the participants," Dr. deVries wrote. "Their blood pressure readings dropped. The percentage of body fat decreased." Maximum oxygen capacity increased, and arm strength also improved. The volunteers continued to show improvement until they reached their peak levels of fitness 18–42 weeks after beginning the program. [2]

In a presentation given at the National Conference of Fitness and Aging, Everett L. Smith, Ph.D., gave an analysis of several recent studies which indicate that "physical activity plays an important role in preventing loss of human functional capacity with age." One study he described was conducted by the Biogerontology Laboratory to

evaluate the decline in flexibility of older people. The subjects in this study were older adults at the Colonial Club in Sun Prairie, Wisconsin. The experimental group of 20 subjects who exercised 3 times a week for one hour over a 12-week period had an average increase in flexibility of 22.6 percent. The control group, which had not engaged in an organized exercise program, demonstrated a 3.75 percent decline, based on pre- and post-tests with the Layton flexometer. [3]

In another study, Dr. Smith compared bone mineral losses among 30 elderly women in a nursing home setting. Twelve women participated in a chair-sitting exercise program for 40–45 minutes, 3 days a week for 3 years. These women showed a bone mineral increase of 2.29 percent, whereas the women in the nonactive control group demonstrated an average bone loss of 3.28 percent. This study indicates that an exercise program can have a positive effect on the calcium content of our bones, which may help to prevent osteoporosis.

The idea that exercise can add extra years to a person's life is being examined in a continuing study of Harvard College alumni. This study examined the physical activity and lifestyle characteristics of approximately 17,000 Harvard alumni. It concluded that "with or without consideration of hypertension, cigarette smoking, extremes or gains in body weight, or early parental death, alumni mortality rates were significantly lower among the physically active." [4] Those men who expended 2,000 calories or more per week on such activities as walking, chair climbing, and other sports had death rates that were one-quarter to one-third lower than their less active counterparts.

Review the Values of an Exercise Program

A good way to show seniors the importance of an exercise program is to write a mnemonic device on a board or chart. This is a technique in which the individual letters of a word or words stand for a separate meaning or concept. See Figure 1.1.

Show a Film or Video About Senior Exercise

A final motivating factor for the activity leader of the Elder Fit program is to show a film or video that depicts seniors actually doing an exercise program. These audiovisual presentations usually include individual testimony by older adults who have successfully participated in such programs. When seniors view these films, they usually elicit such enthusiastic remarks as "if they can exercise at their age—why can't I?"

The value of doing a senior exercise program can be found in the words:

I CARE

I stands for ***I***ndependence

When an older person is physically fit, he or she can function efficiently in performing everyday tasks and even have a reserve for emergency situations. Seniors who are able to do things for themselves maintain a greater sense of integrity than those who must constantly depend on the assistance of others.

C stands for ***C***ardiovascular system

Exercise, particularly an aerobic, continuous exercise such as walking or swimming, improves the efficiency of the heart, blood vessels, and lungs. In a consistent exercise program, the heart muscle itself becomes stronger. It pumps more blood with each stroke, and it rests for a greater amount of time between beats. Exercise also raises the level of HDLs, or high density lipoproteins, which also helps prevent heart attacks.

A stands for ***A***ppearance

Exercise helps improve one's appearance by reducing weight through calorie expenditure. In addition, it strengthens muscles and gives older people a trimmer, more youthful image. When people look and feel good, their mental outlook is generally good as well.

R stands for ***R***elaxation

Exercise reduces body tension and can have such beneficial results as reducing high blood pressure, relieving nervous headaches, and inducing restful sleep. It can also act as a mood elevator and thus eliminate the possible need for antidepressant medications.

E stands for ***E***nergy

Exercise gives seniors a renewed sense of energy and vitality. It enables muscles to do more work with greater efficiency, and thus we feel less tired.

Figure 1.1

Five highly recommended films that are available for purchase or rental are:

- ***Be Well: Physical Fitness in The Later Years,*** Video, Churchill Films, 662 N. Robertson Blvd., Los Angeles, CA 90060.
- ***Run, Don't Walk,*** 16mm Film, Southerby Productions, Inc., 5000 S. Anaheim St., Long Beach, CA 90804.
- ***Health Fitness and Leisure for a Quality Life,*** AAHPERD, 16mm Film or Video, c/o NEA Sound Studios, 1900 Association Dr., Reston, VA 22091.
- ***Staying Well,*** Video, Blue Cross and Blue Shield, 676 N. St. Clair St., Chicago, IL 60611
- ***Staying Active: Wellness After 60,*** 16mm Film, Spectrum Films, Inc., 2755 Jefferson St., Carlsbad, CA 92008.

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[1] John Piscopo, "Indications and Contraindications of Exercise and Activity for Older Persons," *JOPHER* 50 (Nov.–Dec. 1979): 31–34.

[2] Herbert A. deVries with Dianne Hales, *Fitness after 50* (New York: Charles Scribner's Sons, 1982), p. 42.

[3] Everett L. Smith, Ph.D., "Physical Activity: The Foundation of Youth in Aging," *A Synopsis of the National Conference on Fitness and Aging* (Washington, DC., 1981), pp. 30–31.

[4] Ralph S. Paffenbarger, Jr., et al., "Physical Activity, All-Cause Mortality and Longevity of College Alumni," *New England Journal of Medicine* 315 (March 1986): 605–613.

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Rosenberg, Magda. *Sixty-Plus and Fit Again.* New York: M. Evans and Co., 1977.

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Siegener, Ray. *Staying in the Game.* Boston: Houghton Mifflin Co., 1980

2

Precautions Before, During, and After Exercise

The Elder Fit exercises are designed to be of low intensity. However, instructors should advise all participants to seek the approval of their doctors before beginning this or any exercise program. Those seniors who may desire a more strenuous workout to improve their cardiovascular endurance are cautioned to take an exercise stress test in which measurements of cardiovascular functions are examined during exercise on a treadmill or stationary bicycle.

Medical forms may be distributed by activity leaders so that physicians can determine an individual's physical condition and identify exercises that may be contra-indicated. See Figures 2.1 and 2.2 for examples of such medical forms. [1] [2]

Once medical approval has been attained, the participants should be given a clear understanding of how they will benefit from the exercises.

Exercise sessions should be held in a light, properly ventilated room, and the seniors must be advised not to wear restrictive clothing that might interfere with blood circulation. All classes should begin with warm-up exercises to prevent injury to muscles, tendons, and ligaments. "Warm-up exercises should elevate metabolism, increase heart rate and circulation, warm the temperature of the muscles, and increase joint lubrication." [3]

The American Alliance for Health, Physical Education, Recreation and Dance Committee on Aging adopted several General Guidelines for Exercise Programs for Older Persons (age 50 and older). [4] These are particularly important during the exercise sessions to insure the safety of the participants:

Medical Form

Name _____

Address _____ Telephone _____

_____

Age _____ Weight _____ Blood Pressure _____

Heart Rate _____ Smoking Habits _____

Medication _____

_____

Other. Describe any special medical conditions:

_____

_____

_____

Functional Capacity:

• UNRESTRICTED	No restrictions need to be placed on the individual in regard to vigorousness or type of activity.
• MODERATE	Ordinary physical activity needs to be moderately restricted and sustained strenuous effort needs to be avoided.
• MILD	Activity needs to be restricted to a major degree; all vigorous activity should be avoided.
• LIMITED	Ordinary physical activity needs to be markedly restricted.

Figure 2.1
Medical Form [adapted from Fait, Hollis F., and Jay Shivers, *Recreational Service for the Aging* (Philadelphia: Lea & Febiger, 1980), p. 260; and Frankel, Lawrence, and Betty Byrd Richard, *Be Alive as Long as You Live* (New York: Lippincott and Crowell Publishers, 1980), p. 27].

Anatomical Analysis Form

Indicate body areas in which physical activity should be minimized or eliminated:

Body Area	Minimized	Eliminated	Both sides	Right	Left
Neck					
Shoulder girdle					
Hands, wrists, fingers					
Abdomen					
Legs					
Knees					
Feet, ankles, toes					
Other (specify)					

Doctor's signature _____

Address _____

Telephone _____

Date _____, 19____

Figure 2.2
Anatomical Analysis Form [from Fait, Hollis F., and Jay Shivers, *Recreational Service for the Aging* (Philadelphia: Lea & Febiger, 1980), p. 261].

1. Each participant in the program should be periodically monitored for signs of stress (unduly high heart rate, nausea, difficulty in breathing, pallor, pain). Participants should be taught to monitor their own heart rate and to recognize and report irregularities to their exercise leader. In taking the pulse, seniors should be instructed to place all of the fingers of one hand (not including the thumb) over the length of the artery, either the radial at the wrist or the carotid in the neck. Then they should take a 6-second pulse and multiply this

number by 10. The instructor may assist those seniors who find it difficult to obtain their pulse count. Some, who may be unable to use this method because they have hardening of the arteries, may require advice from their physicians.

2. Every exercise program must have a well-defined emergency plan for exercise leaders to follow in case of cardiac arrest or other accidents.
3. Adequate supervision must be available for exercise programs. Exercise leaders should be trained in Cardiopulmonary Resuscitation (CPR) techniques or, at the very minimum, CPR-trained personnel should be in close proximity to the exercise program. Activity leaders can obtain training in CPR techniques by calling their local Red Cross for class schedules in their vicinity.

During the exercise sessions, the seniors must be advised to proceed slowly and exercise within their physical capacities and limitations. The instructor must understand that individuals in each group may exhibit great differences in physical ability and capacity to learn new instructions. He or she must therefore use the exercise lessons only as a guide and not expect everyone to progress at the same pace.

Instructors should also choose exercises that are similar to those illustrated in Chapters 4 through 11 of this book. Certain movements such as head rolling, fast swirling, short, jerky, or bouncing exercises, and those done with locked or stiffened joints are contra-indicated for older adults. [5]

At the end of an exercise session, older people must not stop suddenly, but should "cool down" for a few minutes. This will prevent the uneven distribution of blood to the lower extremities which often occurs if exercise is ended abruptly. Some of the seniors may feel faint or actually pass out if their brains are temporarily not supplied with blood.

Stretching exercises should also be done at the end of an exercise session to reduce soreness and increase flexibility. Hot showers and saunas should be avoided directly after an exercise session because they may elevate blood pressure. It is advised that people wait at least 5 to 10 minutes before taking a shower, and when they do so the temperature should be warm, not hot. [6]

References

[1] Hollis F. Fait and Jay S. Shivers. *Recreational Service for the Aging* (Philadelphia: Lea and Febiger, 1980), pp. 260–261.

[2] Lawrence Frankel and Betty Byrd Richard. *Be Alive as Long as You Live* (New York: Lippincott and Crowell Publishers, 1980), p. 27.

[3] William J. Stone. ***Adult Fitness Programs: Planning, Designing, Managing, and Improving Fitness Programs*** (Illinois: Scott, Foresman and Company, 1987), pp. 126–127.

[4] "General Guidelines for Exercise Programs For Older Persons (Age 50 and Older)," ***The Easterner*** (1): 8.

[5] John Piscopo. "Indications and Contraindications of Exercise and Activity for Older Persons." ***JOPHER*** 50 (Nov.–Dec., 1979): 31–34.

[6] Herbert A. deVries with Dianne Hales. ***Fitness after 50*** (New York: Charles Scribner's Sons, 1982), p. 58.

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3

Implementing the Elder Fit Program

Selecting the Time and Place for Elder Fit Sessions

The best time to schedule Elder Fit sessions is usually during the midmorning hours. Those senior facilities that provide all-day programs, however, can also offer classes in the mid- to late afternoon. Scheduling depends on the total recreation program at each site, space availability, and the preference of the instructor and the participants.

Each Elder Fit session will last approximately 45 minutes to 1 hour. It is advisable that the classes be held two or three times per week, but even if only one session is given, it will help seniors to improve their physical fitness and encourage them to participate in a more active lifestyle.

The most appropriate place for senior exercise sessions is usually determined by the type of facility that will house the program. Nursing homes and community centers, for example, may have one or more spacious, multipurpose rooms that will be suitable for exercise. Other senior facilities, such as some senior centers and most nutrition sites, may only have one room for all activities, including meals.

Activity leaders must therefore review their individual facilities and try to select the best possible site. At a minimum, classes should be held in a room with good lighting, proper ventilation, and furniture that can be moved to provide enough space for class instruction.

Equipment Needs

Little equipment is necessary for the Elder Fit program. The sitting exercises should be done on individual chairs (preferably without side arms) that can later be moved for the floor and movement

activities. These activities may require the acquisition of such inexpensive supplies as balls, hoops, and ribbons.

Mats can be provided for the lying down exercises, but the participants may bring in their own mats or towels as well. The seniors may also bring in other exercise materials from home such as books and soup cans for weights, and hand towels and sticks for calisthenic stretches.

It is important to have either a phonograph or cassette recorder at each Elder Fit session. The instructor should provide light, cheery background music for the exercises, in addition to records and tapes for the dance/movement portion of each class.

The other audiovisual aids that will enhance the program include a microphone and a 16mm projector or video recorder. These can be purchased by the senior facility or can sometimes be borrowed or rented from a local school or library.

Publicizing the Program

Once the time, place, and equipment needs are in order, it is necessary to inform the prospective senior participants about the program. The traditional ways to publicize are through fliers, newsletters, or posters. Newspapers and radio or TV stations may also provide time for the advertisement of courses in their public service announcements. [1]

One of the best ways to publicize the program is to offer a sample class. This session will not only provide stimulating exercise, but it should motivate older adults to improve their physical and mental health. After enjoying an actual class session, the seniors themselves will further publicize the program by word of mouth.

Conducting the Elder Fit Program

The first step in conducting the Elder Fit Program is to tell the class to sit in a circle. In this way, all of the participants are in the best position to see and hear. The instructor should speak in a clear and concise manner, and use a microphone if at all possible.

It is important from the start that the activity leader set the tone of active participation in all class sessions as opposed to creating a competitive "get in shape" atmosphere. The seniors must understand that they should not try to compete with others, nor should they work beyond their physical limitations or capacities.

Classes should begin with the discussion of a HEALTH TOPIC that is pertinent to older people. The content may include such subjects as the importance of exercise for seniors, the types of exercises that they should do, or senior nutrition. In discussing these and

similar topics, the instructor should employ a variety of teaching techniques.

Besides the traditional question and answer method, activity leaders should use films and video cassettes to enhance the lessons. These may be purchased or rented from various foundations and educational companies, or borrowed from local libraries.

Another excellent idea is to acquire the voluntary services of professional guest speakers. Organizations such as the American Heart Association, the American Cancer Society, and others, sponsor individuals whose major function is to provide information to various community groups. Many local doctors will also address seniors on such areas of concern as eye and foot care.

The next part of each Elder Fit class will be the SITTING AND STANDING exercises. These will help to warm up the participants and ultimately help to improve blood circulation, flexibility, and strength. Specific exercises follow in the next chapters, and it is advised that instructors choose only these and similar exercises for their classes.

After these beginning exercises, a typical Elder Fit class continues with the ACTIVITY portion of the lesson. This part may include lying down exercises on mats, dancing or marching activities, or games using balls and other equipment. It is important to end this activity period with a few minutes of a cool down such as a slow walk or easy ball toss.

The final phase of an Elder Fit class is a RELAXATION segment. Here the seniors are instructed in various relaxation techniques, including the relaxation response. In this method, one must progressively relax the body and then proceed to do a repetitive breathing exercise. [2] Once the seniors can elicit the relaxation response, they are then taught several other stress-management techniques that will help them alleviate depression, avoid insomnia, and reduce high blood pressure.

Chapters 4 through Chapter 11 illustrate sample Elder Fit sessions that may be used in conducting health and exercise programs for older adults. These are only suggested lessons. Instructors can use all or part of them as a hands-on guide in working with their particular group of seniors.

Although all of the sample lessons include the progression of sitting, standing, activity, and relaxation portions, each instructor must tailor his or her lesson to the individual participants, whose physical capacity and learning abilities may vary. Some seniors, for example, may never be able to do the standing exercises or move freely through space. For these, the standing and activity portions may be adapted to the sitting position. Instructors should also feel free to repeat the lessons, or parts of lessons, before moving on to new or more difficult material.

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[1] Hollis F. Fait and Jay S. Shivers. *Recreational Service For the Aging* (Philadelphia: Lea & Febiger, 1980), p. 134.

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4

Elder Fit Session One

Explanation of the Elder Fit Program

The Elder Fit program is intended for the frail elderly and as a starting point for the well elderly who may not be engaged in an exercise program.

Discuss the component parts of the Elder Fit program:

Health topic discussion—to stimulate behavioral changes toward a more healthful lifestyle.

Chair and standing exercises—to promote circulation and increase muscle strength.

Dance or movement activities—to improve the efficiency of the heart, blood vessels, and lungs.

Relaxation techniques—to reduce stress and improve mental outlook.

Health Topic for Discussion: Why Should Older Adults Exercise?

To improve the efficiency of the cardiovascular system.

To improve muscular appearance, endurance, and strength.

To help resist disease.

To increase energy and vitality.

To help function independently.

To improve flexibility.

To maintain a healthy mental outlook.

Show a film about the value of exercise for older adults if audiovisual resources are available. (Film sources are listed in the appendix.)

Chair Exercises

Do each exercise five times.

Foot Circles: Lift the right leg up—circle the foot around. Repeat with the left foot.

Ankle Flex-Extend: Lift the right leg up—ankle flex-extend (point toes toward the body—then away). Repeat with left foot.

Knee Lift Toward the Chest: Lift the right knee toward the chest and lower (use hands to help lift if necessary). Repeat with the left knee.

Shoulder Rotations: Place hands on the shoulders. Rotate shoulders forward and then backward.

Arm Stretches Upward: Reach up with the right arm and hold. Repeat with the left arm.

Arm Press: Press the palms of the hands together in front of the chest—move both arms to the right and hold. Repeat to the left side.

Side Stretches: Reach the right hand toward the floor. Lift the left arm above the head—hold. Repeat to the left side.

Trunk Twists: Turn trunk slowly to the right and hold. Repeat on the left side.

Yoga Breathing Break: Take five calming breaths. Inhale—exhale through the nose.

Neck Stretches: Lift neck up and backward slightly–hold. Now, lower the neck, bringing the chin close to the body.

Eye Rotations: Rotate the eyes around an imaginary clock. Look at 12 o'clock, then 3 o'clock, then 6 o'clock, and then 9 o'clock.

Finger Stretch: Separate the fingers of both hands as wide as possible—hold.

Flower Stretch: Make fists with both hands. Open the hands very slowly as if a flower was blooming.

Standing Exercises

Do each exercise five times. Ask the seniors to get up from their chairs and stand behind them for these exercises. Have them hold the backs of the chairs for support if necessary in case of loss of balance.

Ankle and Calf Raise: Lift the heels of both feet off the floor—hold. Lower heels to the floor.

Body Bend: Bend the trunk forward slightly—hold. Bend the truck backward slightly—hold.

Leg Lunges: Lunge to the right (bend right knee, keep the left leg straight)—hold. Repeat with the left leg.

Arm Flings: Raise arms up to the sides at shoulder height. Feel like a bird that is opening its wings.

Ladder Climb: Climb up an imaginary ladder. Climb 10 steps up the ladder and 10 steps down.

Dance Activity

Clear the floor of chairs from the previous exercise.

Line Dance Modified version of "Bad, Bad, Leroy Brown," *Dances in a Line,* by Rudy Franklin, Kimbo Educational Records, KEA 1147, Side B, Band B.

Introduction—swing arms side to side, snap fingers.

Four side steps left, 4 side steps right. (Make locomotor motion with arms as side steps are done.)

Left heel up—return to floor. Right heel up—return to floor. Repeat.

Bend knees—bring arms out in front of body. Bend knees—bring arms out to side of body. Bend knees—bring arms out in front of body. Take a half-turn to the right and begin the dance again. Repeat until the record ends. Then, have the seniors walk in a circle to cool down before returning their chairs to a circle formation.

Relaxation: Recognizing Muscle Tension

Use the Jacobson Technique of Progressive Relaxation as described in the book *Progressive Relaxation* by Dr. Edmond Jacobson, University of Chicago Press, 1938. This technique involves the contracting of each muscle group in the body followed by a release of tension in these muscles.

Demonstration and awareness of the tension/release technique.

- In a seated position, lift the right leg off the floor. Point the toes toward your face and feel tension in the toes, ankle, knee, and thigh—keep holding, keep tensing, and then let go—let all the tension leave your body. Repeat with the left leg.
- Next, stretch both arms out in front. Make a fist with the hands and feel tension in the fingers, wrist, elbow, and shoulder—keep holding, keep tensing, and then let go—let all the tension leave your body. Repeat.

You may now use the relaxation record or cassette entitled ***Relaxation the Key to Life,*** by Rachelle and Barry Goldsmith (Kimbo Educational Records, Long Branch, NJ, L.P. 9080, Side I, Band I, "Tensing and Relaxing Large Body Areas"). This record gives verbal instructions for progressively relaxing large muscle groups, and it is accompanied by soothing background music.

5 Elder Fit Session Two

Health Topic for Discussion: Fitness and the Older Adult

Older people should exercise.

- Review the physical and mental benefits.
- Discuss the origins of the negative attitude toward exercise for older adults. Review the following misconceptions:

  —Exercise ends with schooling.
  —Exercise means only competitive sports and games.
  —Exercise is not feminine.

- Discuss the American spectator vs. the participant.

Unfitness is costly to older people.

- Fitness means longer years of work and productivity.
- Fitness means the ability to enjoy leisure time pursuits.

Fitness for a lifetime is a priority in other countries (e.g., China). Why not in America?
How can we change our present attitude on fitness to be a lifetime concern?

Chair Exercises

Do each exercise five times.

Toe-Heel: Place the right toe to the floor, then the heel. Repeat with the left foot.

Charlie Chaplin Feet: Lift up both legs from the floor. Touch heels together, point toes outward. Now touch toes together.

Knee Lift/Thigh out: Lift right knee to chest using hands to bring the knee upward if necessary. Rotate the right thigh outward. Now return to a knee-up position. Lower leg to the floor. Repeat with the left leg.

Leg Rotations: Move forward on the chair and hold the seat of the

chair for support. Rotate the entire right leg in large outward circles. Repeat with the left leg.

Arm Circling: Place both arms out at the sides at shoulder height. Circle arms forward and then backward slowly.

Elbow Touch: Stretch arms up over the head. Bring arms down and fold the hands behind the neck. Now try to touch elbows in front, then bring elbows to the sides.

Body Rock: Rock the body gently back and forth as though the chair were a rocking chair.

Side Bend: Place hands behind the neck. Bend body to the right—hold. Bend body to the left—hold.

Shoulder Lifts: Bring shoulders up and then down. Bend the elbows at chest height and bring them back behind you, moving shoulder blades closer together.

Yoga Breathing Break: Take five calming breaths. Inhale—exhale through the nose.

Neck Twists: Turn neck to the right slowly—hold. Repeat to the left side.

Yoga Lion Pose: Stretch hands out like the paws of a lion. Open the eyes wide and stick out the tongue—hold.

Finger Touch: Try to touch each finger of the right hand to the palm individually. Repeat with the left hand.

Tennis Ball Squeeze: Pretend to squeeze a tennis ball. (Use real tennis balls if available.)

Finger Bend: Hold out the right hand, palm upward. Now use the left hand to stretch back the fingers of the right hand—hold. Repeat with the left hand.

Standing Exercises

Do each exercise five times. Be sure to hold the back of the chair for support if necessary.

Leg Kicks: Kick the right leg out to the side. Repeat with the left leg.

Knee Lifts: Raise the right knee toward the chest. Repeat with the left knee.

Trunk Bends: Bend the trunk forward slightly—hold. Bend the trunk to the right—hold. Bend the trunk backward slightly—hold. Bend the trunk to the left—hold.

Marching: March in place for 20 steps.

Dance or Movement Activity

Circle walk using the Mexican Mobile Exercises as described in the book *Speedwalking,* by Lilian Rowen and D. S. Laiken, G. P. Putnam's Sons, New York, 1980, pp. 72–74.

Using only a lively, instrumental record or tape, walk in a circle for three rotations.

Now do three walking rotations using Windmill Circling with the arms. As you walk, circle your arms in a backward direction only.

Repeat the original walking sequence.

Now do three walking rotations using the Elbow Seesaw with the arms. As you walk, your elbows are up in front of you. The right hand touches the right shoulder, and the left hand is under the left arm—switch the position of your hands with each stride.

Repeat the original walking sequence.

Now do three walking rotations using the Cradle Swing. As you walk pull both arms to the right side and then the left as though you were rocking a baby.

Repeat the entire sequence until the record ends.

Relaxation: Muscle Tension/Release with a Partner

This relaxation exercise requires the use of mats or towels.

Have the seniors choose a partner. One person lies down, and the other person sits beside him or her.

At the command of the instructor, the individual who is lying down tenses the entire right side of his or her body. Tell the seniors to make a fist and raise their rights arms a few inches off the floor. Then, have

them point their right toes toward their face and feel tension in the ankle, knee, and thigh.

While tensing the right side, tell the seniors to concentrate on relaxing all the muscles on the left side of their bodies. Have them mentally command their left arms and legs to relax for several minutes.

Now have the seated partners test those that are lying down for remaining muscle tension.

Tell them to pick up their partner's left hand and try to dangle it back and forth. Does the arm move easily, or is the movement stiff and forced?

Next, have them pick up their partner's left leg by gently lifting it up at the knee. Does the left leg come straight up in one unit, or is it relaxed and limp?

Repeat the entire exercise by tensing the left side and relaxing the right.

Switch roles with your partner.

Additional suggestions:

- If the seniors are uncomfortable with mixed groupings, pair women with women and men with men for the above tension/release exercise.
- Do this activity seated in a chair, and limit the tension/release to the wrist and arm commands, omitting the leg movements.

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Elder Fit Session Three

Health Topic for Discussion: The Human Machine's Need for a Lifetime of Movement

The human body has over 600 muscles. These must be used or they will deteriorate.

Discuss the change in need for human movement after the Industrial Revolution.

Discuss the daily life of older adults when they were young as opposed to the lifestyle of their children and grandchildren.

People must realize that there is no quick, easy way to become physically fit, especially if they have not exercised in years.

If you want better health, you must stretch, bend, lift, and move your body.

Discuss some fitness gimmicks that people use to get back into shape quickly. Why are they ineffective?

- Diet pills.
- Sauna baths.
- Exercise machines that do the work for you.

Chair Exercises

Do each exercise six times.

Foot Circles: Lift the right leg up, circle the foot around. Repeat with the left foot.

Ankle Turns: Lift the right leg up, turn the ankle to the right—hold. Repeat with the left foot.

Knee Lift/Thigh Press: Lift right knee to chest using hands to bring knee upward if necessary. Now rotate the thigh in an outward position, and cross right ankle over left knee. Press right knee and thigh downward using both hands to do so. Repeat with the left knee.

Body Bend: Push chest forward, then slowly bend the head toward the knees—hold. Return to the original straight sitting position.

Arm Stretch: Stretch arms out to the side—hold. Then place hands on the shoulders. Now bring both arms up overhead—hold. Then place hands on the shoulders.

Shoulder Ups and Downs: Place hands on the shoulders. Arms are bent at the sides. Lift the shoulders and arms up—hold. Return to the original position. Now bring shoulders and arms down. Return to the original position.

Trunk Twists: Turn trunk slowly to the right—hold. Repeat on the left side.

Yoga Breathing Break: Take five calming breaths. Inhale—exhale through the nose.

Steak Biting: Open and close the mouth as though chewing a tough piece of steak.

Neck Turns: Slowly turn the neck to the right, then return to the center position. Now slowly turn neck to the left, and finally return to the center.

Jar Opening: Hold the left hand palm up as if holding an imaginary jar. Twist the lid off of the jar with the right hand. Repeat with the left hand.

Book Lifting: Start with a small book and work up to books of increased weight. Hold a small book in each hand and raise the books

above your head. Now hold the arms down and lower the books to the shoulders.

Standing Exercises

Do each exercise six times. Have the seniors use the backs of the chairs for support if necessary.

Knee-Lift/Foot Rotations: Lift the right knee upward. Now rotate the foot in small circles. Repeat with the left leg.

Knee-Lift/Leg Kick: Lift the right knee upward. Now gently lift the right leg behind—hold. Repeat with the left leg.

See-Saw: Keep the body in a straight position. Bring the arms up and down to the side like a see-saw.

Body Bend: Bend the trunk of the body forward slightly—hold. Return to the original position. Now bend the trunk of the body backward slightly—hold. Return to the original position.

Leg Swinging: Face right and hold onto the chair with the left hand. Swing the right leg forward and back. Repeat to the left side.

Dance or Movement Activity: Creating a Special Environment—The Senior Olympics

Clear the floor of chairs from the previous exercise.

Have the seniors walk several rotations around in a circle to any rousing instrumental tune that might serve as the entrance music for an Olympic stadium. Beethoven's Ninth Symphony is a good example.

Now have the seniors pretend that they are participating in various Senior Olympic events such as swimming, speedwalking, discus, and javelin throws.

Ask the seniors to give some suggestions for other events that are, or could be, part of the Senior Olympics. Act out these events as well.

End this portion of the class by a cool-down walk that simulates the final ceremonies of a Senior Olympic event.

Relaxation: Progressive Relaxation of the Muscles in a Seated Position

Relaxing the muscles of the body.

- Sit quietly in a comfortable position.
- Close your eyes.
- Now begin to progressively relax the body muscles:

—Relax the muscles of the toes, ankles, lower legs, and thighs.
—Relax the muscles of the lower back, middle back, and upper back.
—Relax the muscles of the chest and shoulders.
—Relax the muscles of the upper arms, lower arms, and finger tips.
—Relax the muscles in back of the neck.
—Relax the muscles in the forehead, and in the area around the eyes, nose, and chin.

Breathing technique.

- Inhale through the nose.
- Hold the breath for a few moments.
- Deeply exhale through the nose, letting go of all body tension.
- Repeat this breathing technique for 5 to 10 minutes.

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Elder Fit Session Four

Health Topic for Discussion: The Major Components of Physical Fitness and How Older Adults Can Attain These Components

Flexibility is the ability of a joint to move through a normal range of motion.

- Improved flexibility may help to reduce joint discomfort and lower back pain.
- Improved flexibility will result in ease of movement and in improved posture and personal appearance.
- Some good exercises for older adults to use in improving flexibility are stretching exercises and swimming.

Muscular strength is the amount of external force a muscle or group of muscles can exert.

- With greater muscle strength, older adults can retain their independence by being able to continue performing all of their daily activities.
- Some good exercises for seniors to use in attaining muscular strength are calisthenics and light weights.

Muscular endurance is the ability of a muscle or group of muscles to exert force for an extended period of time.

- Muscular endurance allows an individual to recover from vigorous activity quickly and thus be able to participate in activities for a longer period of time.
- Some good exercises for older adults to use in achieving muscular endurance are bicycle riding, brisk walking, and swimming.

Cardiovascular conditioning is the capacity of the heart, lungs, and blood vessels to take in and deliver oxygen to the muscles.

- Exercise improves circulation and makes the heart a stronger pump.
- Exercise reduces the amount of fat and cholesterol that accumulates on the walls of the blood vessels.
- The best types of exercise for seniors to use in attaining cardiovascular conditioning are aerobic or sustained exercises such as brisk walking, swimming, cycling, and low-impact aerobic dancing.

Physical fitness also means proper nutrition and rest and relaxation. These components will be described in greater detail in the next two chapters.

Chair Exercises

Do each exercise six times.

March and Toe Wiggle: Lift the feet alternately up and down like you are marching in place. Now place the feet flat on the floor and wiggle the toes inside the shoes.

Knee-Lift/Leg Out: Lift the right knee toward the chest using the hands to bring the knee upward if necessary. Now straighten the leg out in front of you—hold. Lower leg to the floor. Repeat with the left leg.

Elbow Touch to Knee. Bend the right knee over the left leg. Place your hands behind your neck. Alternately touch the right and left elbow to the knee. Repeat with the left knee.

Side Stretch: Reach the right hand toward the floor. Lift the left arm above your head—hold. Repeat on the left side.

Shoulder Lifts: Lift the right shoulder upward. Lift the left shoulder upward—return to the original position. Now lift both shoulders upward at the same time and then lower to the original position.

Yoga Breathing Break: Take five calming breaths. Inhale—exhale through the nose.

Eyes Up and Down: Look up with your eyes to the ceiling. Look down with your eyes to the floor.

Vowel Sounds: Say the vowel sounds A, E, I, O, U.

Finger Pyramid: Place the hands in front of the body with fingers and thumbs touching each other. Now press the hands together and hold. Shake the hands apart and then massage the palms.

Pail or Pocketbook Lift: Put a small can (approximately 10 ounces) in

a plastic pail or pocketbook. Now lift the pail or pocketbook up with your right foot under the handle—hold. Repeat with the left foot.

Standing Exercises

Do each exercise six times. Have the seniors use the backs of the chairs for support if necessary.

Pendulum Swing: Swing the arms slowly to the right and then to the left. Now circle the arms over the head.

Body Squats: Point the toes out to the sides. Bend the knees very slowly and hold this position. Now straighten the legs and come to an upright position.

Trunk Bending: Bend the trunk forward slightly—hold. Bend the trunk to the right—hold. Bend the trunk back slightly—hold. Bend the trunk to the left—hold.

Leg Lunges: Lunge to the right (bend the right knee and keep the left leg straight)—hold. Repeat with the left leg.

Apple Picking: Reach up with your right and then left arm, extending the fingers as though you were picking apples off a tree.

Dance or Movement Activity

Walk/dance entitled "Hopelessly Devoted to You," from the record *Grease,* original sound track, RSO Records, Inc., Los Angeles, California 1978. Record 1, Band 3.

Introduction: Point right toes out, return to center. Point left toes out, return to center.

Walk sequence done in a square formation. Walk four steps forward. Point right toes out, return to center. Point left toes out, return to center. Repeat this sequence to the right. Continue another series to the right.

Walk sequence with arm circle overhead. Walk six side steps to the right—walk a full circle in place with arms up overhead. Walk six side steps to the left—walk a full circle in place with arms up overhead. Repeat the above two times. Bend knees right and then bend knees left. Circle in place with arms overhead—finish facing the front as in the beginning of the dance.

Walk sequence done from a front standing position. Walk four side steps to the right—with each step, the arms go out to the sides—spread fingers wide. Walk four side steps to the left—with each step, the arms go up in the air—spread fingers wide. Repeat the above two times. Circle in place with arms overhead.

Repeat walk sequence done in a square formation.

Repeat walk sequence done from a front standing position.

Relaxation

The relaxation response technique as described in the book *The Relaxation Response*, by Dr. Herbert Benson, New York: Avon Books, 1975.

The value of eliciting the relaxation response:

- It returns the body to its natural balanced state as it slows the breathing and heart rates and decreases the blood pressure.
- It helps preserve energy.
- It relieves muscle tension.
- It helps prevent stress-related health problems.
- It helps people sleep better.

Preparation for the relaxation response:

- A quiet environment—find a place where there are few distractions.
- A comfortable position—find a comfortable position that relieves muscular tension but is not so comfortable as to put you to sleep.
- A mental device—repeat a syllable word like "one" silently in order to break the train of distracting thoughts and to help focus your breathing.
- A passive attitude—adopt a let-it-happen attitude. Let thoughts come and go.

The technique of eliciting the relaxation response:

- Sit in a comfortable position and close your eyes. Progressively relax the muscles of the entire body.
- Now begin the breathing technique:
  - —Inhale through the nose.
  - —As you exhale through the nose, mentally think of the word "one."
  - —Continue this breathing technique for 5 minutes. Work up to 10 to 20 minutes.
  - —Sit quietly for a few minutes—then open your eyes.

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Elder Fit Session Five

Health Topic for Discussion: Relaxation is Part of Total Fitness

What things create tension in your life?

Describe the positive and negative stress factors in our lives.

What health problems can result from too much negative or chronic stress?

- High blood pressure.
- Insomnia.
- Ulcers and other disturbances in the digestive tract.
- Headaches.
- Poor circulation and restriction in breathing.

What can we do to reduce tension and possibly avoid the negative effects of stress?

- Get proper rest and sleep.
- Readjust your lifestyle.
- Accept what we cannot change.
- Face responsibilities.
- Talk problems out with a close family member, clergyman, or other professional.
- Do exercise and use physical and mental techniques to reduce stress.

Show the slide/cassette presentation *Managing Stress, Anxiety, and Frustration—Part II,* "Stress and the Body," Ibis Media, Pleasantville, New York, 1980.

Explanation and Illustration of Yoga Exercises

- How is yoga different from Western forms of exercise?
  - —All exercises are done slowly and gently, without strain.
  - —All exercises are done in conjunction with a special breathing technique: Inhale through the nose as you go into a pose or posture. Retain the breath as you hold the posture or keep your body motionless (5–10 seconds). Exhale through the nose as you go out of the posture and return to the original position.
  - —All exercises are repeated only two or three times.
- What are the values of yoga to senior citizens?
  - —It helps retain and restore flexibility.
  - —It helps reduce stress.
  - —It helps improve circulation.
  - —It is executed without strain.
- Demonstration of an exercise using the yoga technique:
  - —The yoga arm fling: Inhale through the nose and raise arms up and out to the sides. Retain the breath as you hold your arms out. Exhale through the nose as you lower the arms to their original position.

Chair Exercises

Use the yoga technique for these exercises. Do each exercise three times.

Ankle Flex/Extend: Lift the right leg off the floor. Inhale through the nose—point the toes toward your face (flex). Retain the breath as you hold your foot and leg motionless. Exhale through the nose—point the toes away from your face (extend) and then lower the leg to the floor. Repeat with the left foot.

Leg Lift: Inhale—lift the right leg up. Retain the breath holding the leg up without moving. Exhale—lower the leg to the floor. Repeat with the left leg.

Seated Twist: Inhale—twist the trunk, neck, and head to the right. Retain the breath as you hold the body motionless. Exhale—return to the original position.

Yoga Breathing Break: Take five calming breaths. Inhale—exhale through the nose.

Arm Roll: Place arms out to the sides and put the palms of your hands in an upward position. Retain the breath as you hold the arms motionless. Exhale—return the arms to the sides.

Neck Turns: Place the right hand under the chin. Place the left hand on top of the head. Inhale—gently turn the neck to the right. Retain

the breath as you hold the head motionless. Exhale—return the head to the front position. Repeat to the left side.

Lion Pose: Exhale through the nose. Stretch the arms out like the paws of a lion. Open your eyes wide and stick out your tongue. Roar like a lion.

Finger Bending: Bend the right arm at the elbow with the forearm and hand straight up in the air. Inhale—bend the fingers of the right hand down by using the left hand to do so. Retain the breath as you hold the fingers downward. Exhale—return the fingers to the original position. Repeat with the left hand.

Standing Exercises

Use the yoga technique for these exercises. Do each exercise three times, and use the back of the chair for support.

Sun Stretch: Stand with feet together and both hands in front of the chest with the fingers pointing upward. Inhale—open your hands upward and arch your back behind you. Retain the breath as you hold your body motionless with head, neck, and back bent. Exhale—return to a front standing position.

Body Bend: Inhale—bend the body forward from the waist. Retain the breath as you bend forward. Exhale—return to a front standing position.

Triangle: Stand with the legs about two feet apart. Inhale—slowly bend to the right and place your right hand against the right knee or thigh. Place the left arm above your head. Retain the breath and hold this position. Exhale—return to the original position. Repeat to the left side.

Tree Pose: Place the left hand firmly on the top of the chair for support. Lift the right leg up placing the sole of the right foot on the inside of the left leg. Inhale—raise the right arm above your head. Retain the breath and hold the body motionless. Exhale—lower the right arm and leg. Repeat with the left arm and leg.

Easy Pose: Make your hands into fists, and then place the hands under the rib cage. Inhale—raise heels and stretch the body upward. Retain the breath as you hold your body up in this position. Exhale—lower the heels to the floor, and drop hands to the sides of the body.

Movement Activity: Yoga Exercises on a Mat or Towel

Body Stretch: Lie on your back with arms at your sides. Inhale—bring your arms up above your head. Retain the breath as you stretch out

the entire body from head to toe. Exhale—return arms to your sides and relax.

Bridge Pose: Lie on your back with your arms at your sides. Bend your knees up feet flat on the floor. Inhale—raise your hips and lower back off the floor. Retain the breath as your body stays motionless in the bridge position. Exhale—slowly lower the back and hips to the floor.

Alternate Leg Pull: Sit on the mat with the legs stretched out before you. Place your left foot against the upper part of your right thigh. Inhale—reach forward with both arms and place your hands on your lower right thigh. Lower your forehead toward the knee. Retain the breath in this position and keep your body motionless. Exhale—return to a straight sitting position. Repeat to the left side.

Cobra: Lie on your stomach with arms at your sides. Rest your forehead on the mat. Bring your arms up slowly and place your hands underneath your shoulders. Inhale—Slowly raise your trunk, neck, and head off the floor. Keep your elbows in a bent position. Retain the breath as you keep your body in this snake position. Exhale—return the body to the original prone position.

Half Locust: Lying in a prone position, rest your chin on the mat. Make fists with your hands and place them close to your sides. Inhale—lift the right leg up and back behind you. Retain the breath as you keep your right leg motionless. Do not bend the knee. Exhale—return the right leg to the mat. Repeat with the left leg.

Relaxation through Mental Imagery

Deep Relaxation: Lie down on your back with arms at your sides and the palms of your hands in an upward position. Progressively relax the body muscles.

Breathing Technique: In the state of deep relaxation, inhale then exhale through the nose for approximately five minutes.

You may use the record or cassette ***Relaxation the Key to Life*** by Rachelle and Barry Goldsmith, Kimbo Educational Records, KIM 9080, Long Branch, New Jersey, 1972. Side 1, Band 3, "Relaxing Your Body Through Mental Imagery." Here, through music and narration, the individual imagines that he or she is small enough to crawl throughout the body and command it to relax.

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Elder Fit Session Six

Health Topic for Discussion: Proper Nutrition is an Important Element of Physical Fitness

What were your eating habits like as your were growing up?

How did your eating habits change as you became an adult?

Discuss the importance of proper nutrition for older adults.

Discuss the nutrients we need in our diets to maintain and improve our health. Review carbohydrates, fats, proteins, minerals, and vitamins.

What are the best sources of these nutrients, and how can a person be assured of getting the right amounts? Review the basic four food group plan.

Should seniors restrict the amount of salt, sugar, and fat in their diets?

Can a calcium-rich diet prevent osteoporosis?

Discuss the importance of a low cholesterol diet.

Chair Exercises

Do each exercise seven times.

Foot Shapes: Lift the right foot off the floor. Move the right foot in a square formation. Repeat with the left foot. Now make a diamond shape by placing the toes toward each other and then the heels toward each other.

Knee Lift/Leg Out/Leg Up: Lift the right knee toward the chest using the hands to bring the knee upward if necessary. Now straighten the leg out in front of you—hold. Finally, with your hands under the thigh, lift the entire leg up. Repeat with the left leg.

Body Rock: Rock the body gently back and forth as though the chair were a rocking chair.

Arm Circles: Place both arms up and out to the sides with palms facing upward. Circle the arms in a backward direction.

Walking Activity in a Seated Position: "Walking Across America," Side A, Band 5, from the record or cassette entitled *Seatworks*, by Dr. Billy Gober, Kimbo Educational, KIM 9100, Long Branch, New Jersey, 1987.

This record is a tribute to Mr. Rob Sweetgall, who is the only man to walk across American and set foot in each of the 50 states. The narrator tells us to walk on our toes and heels. He then has us lift our knees and rock from side to side as we walk with him on an imaginary journey across America.

Standing Exercises

Do each exercise seven times. Be sure to use the back of the chair for support when necessary.

Ankle and Calf Stretch: Lift up the heels of both feet—hold. Lower the heels to the floor.

Knee Lifts: Raise the right knee toward the chest. Repeat with the left leg.

Upper Body Bends: Bend the trunk forward slightly—hold. Bend the trunk to the right—hold. Bend the trunk backward slightly—hold. Bend the trunk to the left—hold.

Shoulder Shrugs: Raise the shoulders up, backward, and down.

See-saw: Keep the body in a straight position. Bring the arms up and down to the sides of the body like a see-saw.

Ladder Climb: Climb up an imaginary ladder. Climb ten steps up the ladder and ten steps down.

Movement Activity: Ball Games

Clear the floor of chairs from the previous exercise.

Have the seniors form a circle.

Use a light-weight rubber ball or plastic beach ball of approximately 10 to 12 inches in diameter.

- Game 1. Under and Over Ball Pass.
  - —In a counter-clockwise circle formation, have one person pass the ball under his or her legs to the person behind.
  - —This person now passes the ball over his or her head to the next individual.
  - —Practice this over and under pass until all of the people in the circle have had a turn.
  - —Now do a round or two of this over and under pass to some lively instrumental record.

—Finally, play the music again as the seniors pass the ball under and over. This time, however, stop the music occasionally and penalize the person who gets caught with the ball. The penalty can be to have that person be out and leave the circle, or it could be to give that person a penalty point. In this version, the person with the least points would win the game.

- Game 2. Hot Potato.
  - —Have the seniors face the inside of the circle.
  - —Have them pass the ball in a clockwise direction from person to person.
  - —Tell them to pretend that the ball is a hot potato. It is so hot that they can hardly touch it without burning their fingers.
  - —Practice passing the hot potato around the entire circle.
  - —Begin the game by passing the hot potato around the circle once again. If a person fails to catch the ball (hot potato), he or she is out and must leave the circle.
  - —Play until there is only one person left in the circle.

Relaxation: The Clock Technique of Relaxation

In a seated comfortable position, elicit the relaxation response for five minutes:

- Close your eyes and progressively relax the body muscles.
- Inhale through the nose. As you exhale through the nose, mentally think of the word "one."

Once you have achieved a state of deep relaxation, begin the clock technique:

- Imagine that you see a clock in front of you. It has only one large hand, which is pointed at 12 o'clock.
- Inhale through the nose, and imagine that the clock's hand begins to move toward 1 o'clock. Exhale through the nose as the hand reaches 1 o'clock. Inhale at 1 o'clock—exhale as the hand reaches 2 o'clock. Inhale at 2 o'clock—exhale as the hand reaches 3 o'clock. Inhale at 3 o'clock—exhale as the hand reaches 4 o'clock.
- Continue this breathing technique around the clock until you return to 12 o'clock again.
- Sit quietly for a few moments and then open your eyes.

10

Elder Fit Session Seven

Health Topic for Discussion: The Difference Between Pulse and Blood Pressure, and the Importance of Having Both Checked Periodically

Definitions:

- Pulse: The number of times our heart beats per minute. Normal pulse is 70–90 beats per minute.
- Blood Pressure: The pressure or force of blood against the arterial walls. Average resting pulse is 120/80. As an individual ages and the arteries become less flexible, there is a tendency for an increase in blood pressure.

How do you know if you have hypertension or high blood pressure?

- Sometimes you have symptoms such as dizziness or headaches.
- Sometimes there are no symptoms. Therefore, it is important to have at least a yearly medical checkup.

What are the consequences of high blood pressure?

- It can lead to coronary heart disease.
- It can cause a stroke in the brain.
- It can lead to complications in the kidneys and also affect the eyesight.

What can be done to lower high blood pressure?

- Stop smoking.
- Reduce salt intake in the diet.
- Learn to relax and get enough sleep.
- Take prescribed medication to reduce high blood pressure.
- Reduce body weight.
- Begin a consistent program of cardiovascular exercise.

Chair Exercises

Do each exercise eight times.

Towel Exercises: Have the seniors bring in a small hand towel (approximately 25 inches long) from home for these exercises. Fold the towel lengthwise a few times and hold it at each end with your hands.

- Towel Ups and Outs: Hold the folded towel at chest height, and bring it up so that your arms are fully extended. Return to the original position. Next, stretch the folded towel in front of you by extending your arms forward. Return to the original position.
- Towel Overheads: Stretch the folded towel up and over your head. Now, stretch the towel behind your neck.
- Towel Trunk Bends: Place the folded towel behind your neck. Bend the trunk to the right—hold. Bend the trunk to the left—hold.
- Towel Body Rock: Place the folded towel up and over your head. Slowly reach the towel over the body toward the ankles—hold. Come up to a straight sitting position and place the towel on your lap.
- Towel Knee Lifts: Hold the folded towel out in front of your body at waist height. Lift the right knee up and try to have it touch the towel. Lift the left knee up and try to have it touch the towel.

Finger Exercises.

- Finger Touch: Try to touch each finger of the right hand to the palm individually. Repeat with the left hand.
- Flower Stretch: Make fists with both hands. Open the hands very slowly as if a flower was blooming.

Weight Lifting Exercises.

- Book Lifting: Hold a small book in each hand and raise the books up above your head. Now, hold the arms down and lower the books to shoulder height.
- Pail or Pocketbook Lift: Place a 1-pound can in a plastic pail or lightweight pocketbook. Lift the pail or pocketbook up with your right foot under the handle—hold. Repeat with the left foot.

Standing Exercises

Do each exercise eight times. Have the seniors use the backs of the chairs for support if necessary.

Knee-Lift/Foot Rotations: Lift the right knee upward and rotate the foot in small circles. Repeat with the left leg.

Leg Kicks: Kick the right leg out to the side. Repeat with the left leg.

Body Squats: Point the toes out to the sides. Bend the knees very slowly and hold this position. Now straighten the legs and come to an upright position.

Arm Flings: Cross both arms down in front of the body. Fling the arms out to the sides at shoulder height.

Walking in the Park: Imagine that you are taking a walk in the park. Begin to walk in place. Once there, you come upon a playground. Pretend that you are participating in the activities of the playground such as climbing on the monkey bars or sitting on the see-saw, etc.

Dance Activity

Use the cool-down dance routine entitled "I Write the Songs," from the record or cassette *Elementary Aerobic Dancing for Physical Education,* by Jackie Sorensen, Kimbo Educational, KEA-1126, Long Branch, New Jersey, 1978, Side C, Band 5, Vocal Instructions and Music.

Review the basic steps (as described in the glossary section of the instruction booklet, pp. 8–24).

- Half Knee Bends: Bend knees keeping the heels close to the floor. Return to the starting position.
- Half Knee Bend Sweep: As you do a slow half knee bend, circle your arms up and across your body.
- Shoulder Rolls Singles: Rotate the right shoulder up, back, down and around. Repeat this motion with the left shoulder.
- Train Step: Step right with the right foot. Draw the left foot to the right foot. Reverse these directions for a left train step.
- Lunges: Lunge with the right foot forward. Repeat with the left foot forward.
- Two Step: Step to the right with the right foot. Then, step the left foot to meet the right foot. Now, step right again. Reverse these directions for the two step to the left.

Instructions for the dance (as described in the instruction booklet, p. 37).

- Introduction: Wait 12 counts. Do one half knee bend sweep (6 counts).
- Pattern 1
  - —4 slow half knee bends (hands clasped behind body).
  - —4 shoulder rolls singles.
  - —1 half knee bend sweep (4 counts).
  - —Repeat the steps above.
- Pattern 2
  - —4 train steps to the right.
  - —3 lunges forward (R,L,R).

—2 claps (lifting R, L heels).
—4 train steps to the left.
—3 lunges forward (L,R,L).
—2 claps (lifting R, L heels).

- Do one half knee bend sweep (4 counts).
- Repeat Pattern 1.
- Repeat Pattern 2.
- Pattern 3
  —1 two step R, 1 two step L—repeat.
  —4 lunges forward (R,L,R,L).
  —2 sets lunge side to side (shoot arms up to a V position as you lunge).
- Repeat Pattern 2 two times.
- Ending
  —1 half knee bend sweep (4 counts)
  —2 sets lunge side to side.
  —Walk 4 steps forward.
  —1 half knee bend sweep (end with arms overhead in a V position).

Relaxation: Neck and Facial Massage

In a seated comfortable position, elicit the relaxation response for 5 minutes:

- Close your eyes and progressively relax the body muscles.
- Inhale through the nose. As you exhale through the nose, think of the word "one."

Once you have achieved a state of deep relaxation, begin the neck and facial massage:

- Place your fingers behind your neck. Make five large circles on the back of your neck by moving your hands in an outward direction.
- Place the fingers of both hands on your chin. Make five small circles on your chin by moving your hands in an outward direction.
- Continue the same sequence of five outward circles with your hands on your cheeks, temples, and forehead.
- Repeat the neck and facial massage three times.

11

Elder Fit Session Eight

Health Topic for Discussion: Staying Active in the Later Years

Review the activities that older adults should participate in to maintain and improve their fitness.

Why is walking so beneficial to seniors? (Chapter 12 will discuss walking in greater detail and illustrate good walking programs for seniors to use.)

Discuss activities that older people can do at home. Discuss the exercise facilities that are available in their communities:

- Senior and community center facilities such as exercise rooms, swimming pools, etc.
- Community recreation facilities such as tennis courts, fitness trails, swimming pools, bowling alleys, etc.
- Health clubs and spas. Discuss the things that older people should look into before joining, such as programs offered, staff credentials, cost, cleanliness of the facilities, etc.

Emphasize that seniors should have periodic physical examinations and that they should consult with their physicians before beginning an exercise program.

Chair Exercises

Do each exercise eight times.

Toe-Heel: Place the right toe to the floor, then the heel. Repeat with the left foot.

Walking in Place: Starting with the right foot, walk in place ten steps. As you walk, lift the knees as high as you can.

Leg Rotations: Move forward on the chair and hold the seat of the

chair for support. Rotate the entire right leg in large outward circles. Repeat with the left leg.

Body Bend: Push your chest forward. Slowly bend the head toward the knees—hold. Return to the original straight sitting position.

Side-Arm Stretch: Place both arms out at the sides at shoulder height, palms facing downward. Stretch the right arm and trunk to the right—hold. Now stretch the left arm and trunk to the left—hold. Return to the original position and drop arms to the sides.

Skiing Down the Slope: Pretend that you have skis on. Place both knees together pointing them to the right. Make fists with your hands and place both arms to the opposite, left side as through you had ski poles in your hands. Keep switching the positions of your arms and legs as though you were skiing down a slope.

Swimming: Place both arms out in front of you and cup the hands slightly. Imitate the crawl swimming stroke, using the head and arm motions.

Tennis Forehand: Turn your body to the right side. Extend your right arm out as though you were holding a tennis racquet. Bring your right arm up and over your head as through you were taking a forehand tennis stroke. Repeat with the left arm.

Ball Sequence: First, pretend that you are squeezing a small ball in both hands with your fingers. Next, pretend that you are throwing the ball with your right arm across the circle to the person seated on the opposite side. Repeat this throw with your left arm. Finally, throw the ball up in the air with your right hand, and catch it with your right hand. Oops—you missed the catch? Bend down slowly and pick up the ball that dropped. Repeat this ball toss with the left arm.

Standing Exercises

Do each exercise eight times. Be sure to hold the back of the chair for support if necessary.

Leg Lunges: Lunge to the right—hold. Repeat with the left leg.

Body Bend: Bend the trunk forward slightly—hold. Bend the trunk backward slightly—hold.

Windmills: Take two steps backward and away from the chair. Place both arms out to the sides at shoulder height. Twist your trunk to the right and place your left hand on your right knee—hold. Twist your trunk to the left, and place your right hand on your left knee—hold.

Side Bends: Place both arms above your head. Bend over to the right—hold. Bend over to the left—hold.

Thigh Stretch: Place your left hand on the chair for support. Bend your right knee and grab your right foot or ankle with your right hand—hold. Repeat with your left leg.

Marching: March in place for 30 steps.

Movement Activity

Walk/Exercise Routine. Clear the room of chairs from the previous exercise. This routine is adapted for older adults from the record or cassette entitled *Not for Women Only,* Bands 1 and 2, Side A, KIM 2025, Kimbo Educational, Long Branch, New Jersey, 1976.

Band 1: Walk as a warm-up (instead of jog) in a counter-clockwise circle to the lively beat. At the end of band 1, face the inside of the circle.

Band 2:

- Twist and Touch: Twist to the right and touch your left knee (instead of your left toe). Twist to the left and touch your right knee. Repeat eight times.
- Lateral Bends: Place arms in front of you at shoulder height. Bend to the right by keeping your right arm out in front of you and placing your left arm over your head. Gently bounce for 2 counts. Repeat the two bounces to the left side with your right arm over your head. Alternate right and left bends eight times.
- Lateral Bends/Arms to Sides: Bend over slowly to the right. Place your left arm over your head and your right hand on your right leg—hold. Repeat to the left side. Do the side bend slowly—only four times to each side.
- Double Lateral Bends: Place both arms above your head. Bend over to the right—hold. Bend over to the left—hold. Bend slowly and hold—only four times on each side.

- Front and Back: Bend forward from the hips, and then bend backward. Repeat only four times.
- Walk in a circle until the end of band 2.

Relaxation: The Destination Technique

In a seated, comfortable position, elicit the relaxation response for five minutes:

- Close your eyes and progressively relax the body muscles.
- Inhale through the nose. As you exhale, through the nose, mentally think of the word "one."

Once you have achieved a state of deep relaxation, begin the destination technique:

- Imagine that it is a beautiful summer's day, and that you are taking a drive on a country road. Your destination is a beautiful lake that is 100 miles away.
- Imagine that you see a road sign that reads 100 miles. Inhale through the nose. Exhale through the nose as you pass this sign and continue with your road trip.
- Inhale through the nose as you approach the next road sign, which reads 90 miles. Exhale through the nose as you pass this sign and continue with your ride.
- Continue to inhale and exhale as you approach and pass the imaginary road signs 80, 70, 60, etc. until you reach the lake—your final destination.
- When you arrive at the lake, imagine that you get out of your car and walk to the water's edge. There you see a rowboat. Imagine that you get into the boat and row out to the middle of the lake. Stop, lie back, and feel the warmth of the sun upon you. Smell the country air and the summer flowers. Totally relax for a few moments.
- Now, imagine that you row the boat back to shore. Sprinkle some water on your face, open your eyes, and feel quite refreshed from your country journey.

12

Walking as an Adjunct to the Elder Fit Program

Once the Elder Fit program is under way, instructors should encourage their students to consult with their physicians about participating in a walking program.

Walking is one of the best types of exercise for older people because it is such a natural form of physical activity. It is far safer than jogging or running, which places tremendous strain on joints and can cause back and foot ailments as well as coronary problems for the unconditioned, aging individual. [1] Walking has great appeal for older people because it does not require special facilities or equipment, and it can be done at any time of the day.

Walking is an important addition to the Elder Fit program because it adds an aerobic component that will increase the body's intake and use of oxygen and thus produce positive physical changes or training effects on the cardiovascular system.

Some results of an aerobic exercise program are that total blood volume and lung capacity increase, giving the individual greater endurance. The heart muscle also grows stronger, allowing it to pump more with each stroke, and the (HDL) high density lipoprotein in the blood increases, reducing the individual's risk of developing atherosclerosis, or hardening of the arteries. [2]

In addition to improving the cardiovascular system, a good walking program will help reduce stress, stimulate weight loss, and promote a sense of general well being in older people.

It must be emphasized that these results will not come from taking an occasional stroll or by doing such activities as supermarket shopping or home cleaning chores. Walking is an effective fitness exercise for older adults when it is done consistently (at least three to four times per week) at a brisk pace (approximately three to four

miles per hour) with a full arm swing that will stimulate the heart to achieve a target or training rate.

How to Determine Target Heart Rate

The first step in beginning a walking program is to determine the target heart rate that will produce cardiovascular benefits. For senior citizens, the target zone is usually calculated by taking the maximum heart rate, which is 220 minus a person's age, minus the resting heart rate, times 60–70 percent, plus the resting heart rate. (Check with a physician for an individual walking pace.) Examples of target heart rates are given in Table 12.1.

Table 12.1
Target Heart Rate*

		Target zone	
Age	*Max. heart rate*	*60%*	*70%*
50	170	134	143
60	160	128	136
65+	155	125	132

*Assumes a resting heart rate of 80.

Instructors should review pulse-taking procedures so that the seniors can determine their heart rates during each walk. They should put the first and second fingers of their right hands on the radial artery of the inner wrist of their left hands. Then, they should count the number of beats for 6 seconds and multiply this number by 10 for the total beats per minute. If the senior group is frail, emphasis should be placed on progression and consistency rather than on a pulse-rated walking program.

"A heart rate above the target zone generally indicates that the exercise is too vigorous; a rate below shows that the individual is not working hard enough." If the seniors cannot carry on a conversation as they walk, they are going too fast. [3]

Walking Programs for Older Adults

Two walking programs that are recommended for the over-50 age group include one that was developed by the President's Council on Physical Fitness and Sports [3], and another that was designed by Dr. Kenneth H. Cooper. [2] Both plans begin slowly and have people work up to a 30- to 45-minute walk, 4 or 5 times per week in order to provide an adequate level of aerobic fitness.

Everybody's Walking for Fitness—The President's Council on Physical Fitness and Sports

Begin by walking at a relaxed pace for 10 minutes, working up to 20 minutes every other day at a brisk pace. (A brisk pace = approximately 3–4 miles per hour or 120 steps per minute.)

After achieving the level of 20 minutes of brisk walking every other day for 1 month, increase your walking time to 30 minutes.

Repeat 30-minute walks 4 or 5 times a week.

In this program seniors can keep a log of their walking progress and then qualify for a Presidential Sports Award.

The qualifying standards for an award in Fitness Walking are:

- Walk a minimum of 125 miles.
- Each walk must be continuous, without pauses for rest, and the pace must be at least 4 mph.
- No more than 2 ½ miles in any one day may be credited to the total.

The Aerobics Program for Total Well-Being—Dr. Kenneth H. Cooper

Table 12.2
Walking Exercise Program—50 Years of Age and Older

Week	*Distance (miles)*	*Time goal (min.)*	*Freq./wk.*	*Points/wk.*
1	1.0	20:00	4	4.0
2	1.5	30:00	4	8.0
3	2.0	40:00	4	12.0
4	2.0	38:00	4	13.3
5	2.0	36:00	4	14.7
6	2.0	34:00	4	16.2
7	2.5	42:00	4	21.7
8	2.5	40:00	4	23.5
9	2.5	38:00	4	25.5
10	3.0	47:00	4	30.0
11	3.0	46:00	4	31.0
12	3.0	45:00	4	32.0

In this program, aerobic conditioning can be maintained after 12 weeks by continuing to walk 4 times per week. This is also equivalent to 32 aerobic points, which is Dr. Cooper's unique way of describing how much exercise is necessary to achieve adequate aerobic capacity. He emphasizes that one should not try to cram these points into

one or two sessions. "... Vigorous activity once a week for the man or woman past 40 years of age is, to use the strongest negative medical term, contraindicated." [2]

Step by Step to Walking for Fitness

Seniors should consider the following steps once they have selected a walking program:

Step I—Consult with your physician before starting the program. A stress test with an electrocardiogram is usually recommended for older people in order to check the condition of their cardiovascular system during the exercise.

Step II—Be sure to warm up before and cool down after your walk. A proper warm-up increases the body temperature and helps prevent injury to the body muscles.

The standing exercises of the Eldercise program (Chapters 4–11) are good warm-up exercises for the walking program because they stretch many of the muscle groups that will be used as you walk. Another good warm-up is simply to begin your walk at a slow, non-aerobic pace so that your body can adjust gradually to an increased activity level. A slower walking pace should also come at the end of each walking session in order to return the body to its pre-exercise condition.

Step III—Monitor your pulse periodically as you walk. If you experience any irregularities in your pulse or incur chest pains or dizziness, stop walking and sit quietly (with your head between your legs if possible) or lie on your back until the symptoms diminish before proceeding home slowly. Describe these unusual symptoms to your doctor before continuing the walking program. [1]

Step IV—Wear the proper attire for walking.

Clothing. Older people do not need to buy a special exercise outfit for walking. Loose-fitting clothing that is appropriate to weather conditions is all that is necessary. On warm days, light colors and fabrics are important as well as a hat or visor to protect the head and face from sun damage and headaches. On cold days, older people should wear several layers of clothing, gloves, and a wool hat that will prevent heat loss from the scalp. The purchase of a fold-up raincoat is a good idea in case of unpredictable weather conditions.

Shoes. There are several special walking shoes and sneakers on the market that offer a cushioned inner layer to absorb shock, an extra pad at the heel, and flexible soles to provide for greater bending of the walking shoe. These can certainly be purchased, but they are not necessary. Any comfortable shoe that allows the foot to breathe (usually made of leather or canvas), has room for foot expansion, and offers proper arch support will be sufficient. A foam rubber insert can

be placed in these shoes to help absorb the shock that occurs when the foot hits the ground.

Step V—Enjoy your walking program. Seniors should view their walking program as an opportunity to enjoy their physical surroundings, socialize with walking companions, and think of creative ideas and solutions to problems.

References

[1] Albert Marchetti, M.D., *Dr. Marchetti's Walking Book* (New York: Stein and Day, 1980), pp. 42, 64–65, 131–134.

[2] Kenneth H. Cooper, M.D., M.P.H., *The Aerobics Program for Total Well-Being* (New York: M. Evans and Company, 1982); pp. 113, 134, 156.

[3] *Everybody's Walking for Fitness* (Washington DC: The President's Council on Physical Fitness and Sports in cooperation with Dr. Scholls and the U.S. Office of Consumer Affairs, pamphlet-0905B, 1986), pp. 6–9, 16.

Further Reading

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Kuntzleman, Charles. *The Complete Book of Walking.* New York: Simon and Shuster, 1978.

Kuntzleman, Charles and Beth. *Fitness with Fun, Fitness is Ageless.* Spring Arbor, MI: Arbor Press, 1978.

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13

Evaluation of the Elder Fit Program

At the present time, there is no widely used battery of physical fitness tests for older adults over 60 years of age. The Association for Research, Administration, Professional Councils and Societies (ARAPCS) has recently appointed a task force that has developed a preliminary field test of fitness for older Americans. The components of this test include such measures of fitness as strength, flexibility, balance, coordination, and reaction time. [1]

After substantial field testing of these fitness tests, the task force will establish norms for the 60 and older age group. Such a battery of tests may then be used prior to the Elder Fit sessions and at various intervals during the program to assess improvement in physical fitness. Until such a fitness test is firmly established, however, the safest and most reliable source of a fitness evaluation remains an initial and then periodic office visits with a physician.

It is essential that older adults have a thorough checkup before beginning any exercise program. Bud Getchell, Ph.D., Executive Director of the National Institute for Fitness and Sports, describes three important components of a screening evaluation in the *Fitness Book*. [2]

1. Medical/Health History—family history, past health, medications, smoking history, lifestyle, and activity patterns.
2. Resting Physical Exam—body weight and composition (percent fat), heart rate, and blood pressure.
3. Selected Laboratory Tests—blood tests such as total cholesterol, high density lipoproteins, triglycerides, glucose, and others.

Dr. Kenneth Cooper recommends that people who are over 40 years of age include in their exam a stress test, with an electrocardiogram to determine heart function under exercise conditions. [3]

Once seniors have been given approval to participate in the Elder Fit program, it is important for them to keep in touch with

their physicians to appraise them of their exercise progress and indicate any signs of stress they may have observed. Subsequent re-evaluation of physical condition will be based on such verbal progress reports, as well as the findings of the preliminary exam and laboratory tests.

Another way of evaluating the effectiveness of the program is to have the participants complete a "pre" and "post" Elder Fit questionnaire. The beginning survey should try to record the senior's individual health habits as well as his or her attitude toward physical activity. (See Figure 13.1.)

Figure 13.1
Preliminary Elder Fit Questionnaire*

Yes ___ No ___ 1. I have enough information about my own health to take proper care of myself.
Yes ___ No ___ 2. I am satisfied with my overall physical condition.
Yes ___ No ___ 3. I think that exercise is helpful in keeping older people physically fit.
Yes ___ No ___ 4. I participate (at least 3 times per week) in aerobic activities that involve a minimum of 20 minutes of continuous movement (i.e., walking, swimming, bicycling).
Yes ___ No ___ 5. I do exercises that improve my muscles such as yoga or calisthenics for 15–20 minutes at least 3 times per week.
Yes ___ No ___ 6. I understand the precautions that should be followed when beginning an exercise program.
Yes ___ No ___ 7. I can describe the value of a regular exercise program for older adults.
Yes ___ No ___ 8. I have a healthy diet and get the nutrients that I need.
Yes ___ No ___ 9. I usually eat breakfast.
Yes ___ No ___ 10. I limit the amount of saturated fats and cholesterol in my diet.
Yes ___ No ___ 11. I limit the amount of salt in my diet.
Yes ___ No ___ 12. I avoid eating sweet snacks and soft drinks.
Yes ___ No ___ 13. I know the effects of being overweight.
Yes ___ No ___ 14. I can describe a weight loss program in relation to caloric intake and exercise.
Yes ___ No ___ 15. I know my blood pressure.
Yes ___ No ___ 16. I am usually relaxed and do not feel a lot of stress in my life.
Yes ___ No ___ 17. I get enough sleep.
Yes ___ No ___ 18. I avoid smoking cigarettes.
Yes ___ No ___ 19. I avoid using alcohol and other drugs as a way of coping with stress.
Yes ___ No ___ 20. I believe that exercise and meditation can release tension.

*Adapted from the *Project Stay Well Registration Form* (New York: The New York City Department for the Aging—Research Unit, 1983); and David K. Miller and T. Earl Allen, *Fitness—a Lifetime Commitment*, 2nd ed. (Minneapolis, Minnesota: Burgess Publishing Company, 1982), Laboratory 1, pp. 197–201.

A similar questionnaire, which is completed after participation in the Elder Fit program, should show an increase in affirmative responses, and thus, some positive change toward a healthier and more active lifestyle. This subsequent survey should not only include the health habit questions that appear in the original questionnaire, but it should also be specific about the Elder Fit program and its importance in changing health attitudes and behavior. (See Figure 13.2.) [6]

Figure 13.2
Elder Fit Follow-up Questions*

1. Would you say that the Elder Fit program met your expectations?
   Yes ___ No ___
   If no, explain what you would have added or deleted to the program.
2. Do you think you have changed in any way because of the Elder Fit program?
   Yes ___ No ___
   If yes, in what way(s) do you think you have changed?
3. At home, do you now practice any of the things you learned in the Elder Fit program?
   Yes ___ No ___
   If yes, explain what things you now practice.
4. What type(s) of exercise did you participate in prior to the Elder Fit program?
   Have you continued this exercise?
   Yes ___ No ___
   What type(s) of exercise do you now do?
   How often and for what duration do you participate in these activities?
5. Which stress management activity from the Elder Fit program did you find the most effective?
   Are you doing any relaxation techniques at home?
   Yes ___ No ___
   If yes, explain which technique(s) you are using.

*Adapted from the *Project Stay Well Follow-up Form* (New York: The New York City Department for the Aging—Research Unit, 1983).

References

[1] "Task Force Forges Ahead on Fitness Norms for Older Americans," *JOPERD*—Update (May/June 1987), p. 11.

[2] Bud Getchell, Ph.D., *The Fitness Book* (Indianapolis, IN: Benchmark Press Inc., 1987), p. 34.

[3] Kenneth H. Cooper, M.D., M.P.H., *The Aerobics Program for Total Well-Being* (New York: M. Evans and Company, Inc., 1982), p. 123.

[4] *Project Stay Well Registration Form* (New York: The New York City Department for the Aging—Research Unit, 1983).

[5] David K. Miller and T. Earl Allen. ***Fitness—A Lifetime Commitment,*** 2nd edition (Minneapolis, MN: Burgess Publishing Company, 1982), pp. 197–201.

[6] ***Project Stay Well Follow-up Form*** (New York: The New York City Department for the Aging—Research Unit, 1983).

Further Reading

Kuntzleman, Charles T., and the Editors of Consumer Guide. ***Rating the Exercises.*** New York: William Morrow and Company, Inc., 1978.

Stone, William, J. ***Adult Fitness Programs: Planning, Designing, Managing, and Improving Fitness Programs.*** Glenview: IL: Scott, Foresman and Company, 1987.

Appendix: Additional Resources for the Elder Fit Program

Instructors of the Elder Fit program should look to the following sources for additional information about older people.

Governmental Resources

Administration on Aging
Office of Public Information
330 Independence Ave., S.W.
Washington, DC 20201

Federal Council on the Aging
330 Independence Ave., S.W.
Washington, DC 20201

Office of Human Development Services
200 Independence Ave., S.W.
Washington, DC 20201

The United States House of Representatives Select
Committee on Aging
House Office Building, Annex 1
Washington, DC 20515

The United States Senate Special Committee on Aging
Dirksen Senate Office Building
Washington, DC 20510

Selected Organizations for the Aging

American Association of Retired Persons
1909 K St., N.W.
Washington, DC 20049

American Geriatric Society
10 Columbus Circle
New York, NY 10019

Andrus Gerontological Information Center
University of Southern California
Los Angeles, CA 90007

Center for the Study of Aging
706 Madison Ave.
Albany, NY 12208

Gerontological Society of America
1935 K St., N.W.
Suite 305
Washington, DC 20036

International Association of Gerontology
c/o Tokyo Metropolitan Geriatric Hospital
Itabashiku
Tokyo, 173, Japan

National Council on the Aging, Inc.
1828 L St., N.W.
Washington, DC 20036

National Institute on Aging
Building 31, Rm 5635
Bethesda, MD 20205

Related Professional Organizations

American Alliance for Health, Physical Education,
Recreation and Dance
1900 Association Dr.
Reston, VA 22091

American Dance Therapy Association
2000 Century Plaza
Suite 230
Columbia, MD 21044

American Health Care Association
1200 15th St., N.W.
Washington, DC 20005

American Physical Therapy Association
1156 15th St., N.W.
Washington, DC 20005

National Recreation and Park Association
1601 North Kent St.
Arlington, VA 22209

Selected Health-Related Organizations

Alcoholics Anonymous
P.O. Box 459, Grand Central Station
New York, NY 10017

Alzheimer's Disease and Related
Disorders Association
32 Broadway
New York, NY 10004

American Cancer Society
777 Third Ave.
New York, NY 10017

American Diabetes Association
1 W. 48th St.
New York, NY 10020

American Heart Association
7320 Greenville Ave.
Dallas, TX 75231

Arthritis Foundation
1314 Spring St., N.W.
Atlanta, GA 30309

National Association for Mental Health
1800 North Kent St.
Arlington, VA 22209

National Dairy Council
6300 North River Rd.
Rosemont, IL 60018

National Federation of the Blind
1346 Connecticut Ave., N.W.
Washington, DC 20036

The National Hearing Aid Society
20361 Middlebelt Rd.
Livonia, MI 48152

Osteoporosis Foundation
612 N. Michigan Ave.
Chicago, IL 60611

Parkinson's Disease Foundation
640 W. 168th St.
New York, NY 10032

Selected Sources of Audiovisual Material on Health and Fitness for Older People

Films and Video Cassettes

Churchill Films
662 N. Robertson Blvd.
Los Angeles, CA 90069

Filmakers Library
133 E. 58th St.
New York, NY 10022

Media Library
Gerontological Film Collection
P.O. Box 12898
North Texas University
Denton, TX 76203

Michigan Media
416 Fourth St.
Ann Arbor, MI 48109

Spectrum Films, Inc.
2755 Jefferson St.
Carlsbad, CA 92008

Records and Cassette Recordings

Kimbo Educational
P.O. Box 477
Long Branch, NJ 07740

Educational Activities, Inc.
P.O. Box 392
Freeport, NY 11520

Worldtone Music
230 7th Ave.
New York, NY 10011

Selected Sources of Props and Equipment for Senior Exercise

Flaghouse, Inc.
150 N. MacQuesten Pkwy.
Mt. Vernon, NY 10550

Snitz Manufacturing Co.
2096 Church St.
E. Troy, WI 53120

Jayfro Corp.
P.O. Box 400
Waterford, CT 06385

Things from Bell
4 Lincoln Ave.
P.O. Box 706
Cortland, NY 13045

J. L. Hammett Co.
Hammett Place
Braintree, MA 02184

Sports/Dance/Fitness
Educational Projects, Inc.
P.O. Box 1704
Fort Lee, NJ 07024

Elder Fit
A Health and Fitness Guide for Older Adults

Diane Penner

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